



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of  
ALONZO W. BEASLEY, JR.

Serial No: 10/684,639

Examiner: Singh, Arti R.

Filed: October 14, 2003

Art Unit: 1771

Title: MOTOR VEHICLE AIRBAG AND  
FABRIC FOR USE IN SAME

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION UNDER 37 CFR 1.131**

Dear Commissioner:

I, the individual whose signature appears below, do hereby declare that:

1. I am an officer of Safety Components Fabric Technologies, Inc., owner of the above patent application by virtue of written assignment from the inventor.
2. This application was filed on October 14, 2003, but claims the benefit of application Serial No. 09/558,766, filed April 26, 2000.
3. I have been advised that all claims of the application have been rejected as being unpatentable over the disclosure of U.S. Patent No. 6,455,449 to Veiga et al. issued on September 24, 2002, and filed on September 3, 1999.
4. The present invention resides in the discovery that urethane-coated airbag fabrics may include a base fabric made from finer denier yarns of alternating deniers which produces a crest and trough pattern on the surface that enhances urethane adhesion.
5. As supported by the factual evidence submitted herewith, the claimed invention was conceived and, on information and belief, was reduced to practice prior to September 3, 1999.

**BEST AVAILABLE COPY**

6. The originals of Exhibits A through C discussed hereinafter in detail were all prepared prior to September 3, 1999. Actual dates and prospective customer name have been deleted.

7. As evidenced by Exhibit A, a base fabric of 315d warp and alternating fill of 315d and 210d denier was prepared. This fabric was designated style 4934. The first two pages of Exhibit A make up the request from the inventor for a sample of this fabric. Note that the "endues" of the fabric is indicated to be "airbag." The third page of Exhibit A is a "Sample Specification" for this fabric. The fourth page is a "Warping, Processing, Weaving Order and Headend Ticket" (stamped "Air Bag") for this fabric. After the base fabric was made, it was tested as indicated by the "Certificate of Conformance" forming the last two pages of Exhibit A.

8. Exhibit B indicates that another sample of style 4934 was prepared. This base fabric also had 315d warp and alternating fill of 315d and 210d denier. The first page of Exhibit B is a "Sample Specification" for this fabric. The third page is a "Warping, Processing, Weaving Order and Headend Ticket" (stamped "Air Bag") for this fabric. After the base fabric was made, it was tested as indicated by the "Certificate of Conformance" forming the last two pages of Exhibit B.

9. As evidenced by Exhibit C, a base fabric of 420d warp and alternating fill of 420d and 315d denier was prepared. This fabric, designated style 4951, was requested by the document making up the first two pages of Exhibit C. After the base fabric was made, it was tested as indicated by the "Certificate of Conformance" forming the last two pages of Exhibit C.

10. A style 4934 base fabric was sent to the prospective customer (a coater), whereupon a urethane coating was applied. Satisfactory adhesion levels were reported.

11. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SAFETY COMPONENTS FABRIC TECHNOLOGIES, INC.

Signed: ✓ Stephen B. Duerk

Name: ✓ Stephen B. Duerk

Title: ✓ President

Date: ✓ 1-31-05

# **EXHIBIT A**

PROD. REQ. & COST FORM

TO: FRANCISCO BEDOYA

DATE \_\_\_\_\_

I. MARKETING

CUSTOMER: \_\_\_\_\_ CUST. S/# \_\_\_\_\_ C/R# 10-387

SCFTI S/#: 4934-02 WEAVE: PLAIN ENDUSE: Aib. LEVEL 4

GR. (MIN./NOM.)	FIN. (MIN./NOM.)	YES	NO
ENDS/IN: <u>55</u>	<u>60</u>	<u>X</u>	_____
PICKS/IN: <u>64 @ 50 Back</u>	<u>63-65</u>	SPUN YARN TINT	_____
WIDTH: <u>75-76</u>	<u>69.5-76.5</u>	HI. TEN REQD	_____

WARP: 315 / 144 / T-447 AK20 OLD/NEW

FILL: 315 / 144 / T-447 AK20 (Use Both) (pick + peak) 28B OLD/NEW

SCFTI PROCESS: 210/68/R-20 Dupont Nylon

GREIGE	_____	CUT LENGTH RANGE	<u>500yds.</u>
HEATSET IN THE GR.	_____	MIN PC. LENGTH	<u>200</u>
SCOUR & HEATSET	<u>X</u>	SPLICES ALLOWED	<u>yes</u>
APPLY & FINISH	_____	PACKAGING	<u>to 500</u>

DESCRIBE FINISH: \_\_\_\_\_ FINISH CODE: 9126

CFM RANGE: NA CUST. SPEC # TDD. DATED: \_\_\_\_\_  
 COPY OF CUST. SPEC ATTACHED \_\_\_\_\_ (TEST REQ. Y/N) (CERT REQ Y/N)  
 DEPT#: \_\_\_\_\_

II. TECHNICAL

TYPE LOOM: weaving MULTIPLE PICKS - YES/NO EQUIVALENT PICKS: N/A  
 YARDS PER BEAM: N/A (WARP IN PLANT & NEW YARNS ONLY)

CONST. IN LOOM: REED WIDTH: 41.25 SLEY: 520 OFF LM PICKS: 640

WARP: 315 / 144 / T-447 AK20

FILLING: 315 / 144 / T-447 AK20

WARP YDS/LB: 14.150 FILLING YDS/LB: 14.150 = 315 / 22.25 = 14.150

EST. WARP CONTRACTION: 8%

REMARKS: sample for test

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

PROCESSES REQUIRED: (CIRCLE AS APPLICABLE)

PREPARATION	WEAVING	FINISHING	FINAL	TESTING
WINDING	<u>DORNIER</u>	BATCH	<u>SLIT</u>	<u>INTERNAL</u>
TWISTING (IN/OUT)	<u>SULZER</u>	<u>SCOUR</u> JIG/CONT.	<u>INSPECT</u>	<u>CUST. LOT</u>
WARPING (IN/OUT)		CAN DRY	<u>PACK</u>	<u>NONSTD.</u>
(BLOCK/TRANS.)		CONTACT HT SET SHIP		PPAP
BEAMING/SLASHING		CALENDER/TENTER		ANNUAL
				QUAL.

### III. ENGINEERING

LOOMS/WEAVER: \_\_\_\_\_ OTHER: \_\_\_\_\_

### IV. COST DEPARTMENT

DATE FWDED: \_\_\_\_\_

YDS/LOOM \_\_\_\_\_ TARGET CONTRIBUTION \_\_\_\_\_ FAB. WT. \_\_\_\_\_ OZ./SQ. YD. \_\_\_\_\_  
120 HRS. \_\_\_\_\_ LOOM/WK \_\_\_\_\_ YD \_\_\_\_\_

COST: \_\_\_\_\_  
VAR./YD: \_\_\_\_\_ FX/YD: \_\_\_\_\_ B/E/YD: \_\_\_\_\_ MIN. YD: \_\_\_\_\_ TAR. YD: \_\_\_\_\_

YARN PRICE: \_\_\_\_\_ WARP: \_\_\_\_\_ FILL: \_\_\_\_\_

SPECIAL INSTRUCTIONS: \_\_\_\_\_

DISCLAIMERS/COMMENTS: \_\_\_\_\_

A. has adhesion problem with low tension before  
630 D.

B. Run this as Pattern 02.

C. Pick insertion should BE 1/2 and 1/2 of above filling  
yarns. See Tent.

D. Low Tension on warp yarn.

E. This is final ONLY

SUBMITTED BY L. B. Bate

DATE: \_\_\_\_\_

APPROVED BY MARKETING MGR. L. B. Bate

DATE: \_\_\_\_\_

APPROVED BY DIR. TECH. SVCS K. Bate

DATE: \_\_\_\_\_

REJ. (APPR) TECH. SERV. MGR. K. Bate

DATE: \_\_\_\_\_

APPROVED BY MFG. REF. COMM. K. Bate

DATE: \_\_\_\_\_

FORWARD TO: \_\_\_\_\_ OR \_\_\_\_\_

CC: J. ANDERSON  
J. UNDERWOOD

S. DUERK  
D. HARVELL

AFETY COMPONENTS FABRIC  
TECHNOLOGIES, INC.

STYLE M ER LISTING  
Sample Specification

PAGE:

Style:	M4934-0002-9026	Level:	IV	U/M:	YD
Description:	315.210 60 x 64 Low Warp tension	Status:	ACT	Department no:	10
Fabric:	8 harness and 6 banks of drop wires, 71% air space reed	Product code:	89	Airbag - driver uncoated	
Weave:	Dupont t-6.6 nylon Plain	Loom type:	Dornier general	Primary customer:	/ VARIOUS
	PICK AND PICK WITH 2 FILLING YARNS	Requested by:	L. BEASLEY		
Face:	Either	Reed width:	81.23		
Weave cut (yds):	500	Dents/inch:	26.000		
Edges:	Heat slit at loom	Dents/dent:	2		
Type size:	BP-44C-4t SOLIDS IN SIZE BOX, 1t STRETCH ON SLASHING	Sley count:	52.000		
Other:	1 end 420/68 dk blue nylon 24 ends from left side at slasher	No. ends:	4.224		

Warp yarn code: RMNL1538 Supplier: ACORDIS INDUSTRIAL FIBERS

Description: 315/144 T-447 HRT-8 Acordis Scottsboro Nylon

Twist: Airbag Beams

None

Fill yarn code: RMNL1539 Supplier: ACORDIS INDUSTRIAL FIBERS

Description: 315/144 T-447 HRT-8 Acordis Scottsboro Nylon

Twist: Airbag Tubes

None

Packaging: See final inspection instructions

Grading: See final inspection instructions

Purpose: nylon coating fabric (Air bag)

Tube size: See final inspection instructions

Hold code: 02

Putup code: 11 Roll Goods

Tare wt:

CFM code:

Std wt (yds/lb):	1.59	Width (in):	54 x 63	Est. Off Loom	Min	Max	Target
Weight (lbs/yd):	0.628	Count (W x P):	56 x 65	Est. Finished	Min	Max	Target
Allow dev %:	3.00	Wt (oz/syd):	4.71	Width (in):	69.50	70.50	70.00
				Count (W x P):			60 x 64
				Wt (oz/syd):	4.93	4.93	4.93

Comments: As c/r #10-387 var. M4934-01

Current rev: 000

Revision date: 05/25/1999

original

PILLING YARN #2

RMNL 1618 210/68 R20 T-729 TUBES FROM DUPONT

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1015 (12/97)

(QMS-102.103)

WARPING ORDER

F-1017 11/96

(RE: QMS - 102)

SAFETY COMPONENTS FABRIC TECHNOLOGIES, INC. - DUNEAN PLANT - 80

WARPING, PROCESSING, WEAVING ORDER AND HEADEND TICKET

STYLE: W-4934 EXP.-2 TYPE CLOTH: NYLON COATING AIR BAGS DATE: \_\_\_\_\_

NO. REED DENT ENDS TOTAL  
BEAMS: 1 SPREAD: 81.23" REED: 26.00 DENT: 2 DENTS: 2156\* SLEY: 52.00 SHAFTS: 8

DRAW: STRAIGHT WEAVE: PLAIN EST % TYPE DIST. BTWN  
CONT: 8% LOOM: DORNIER BM. HEAD: 81.75"

DEPT.: 10 BODY SELV TOTAL  
ENDS: 4224 ENDS: 1 ENDS: 4225

WEIGHT  
PER YARD: .0001

SELVAGE: \*\* 1 END 420/68 DEN. DARK BLUE NYLON - HEAT SLIT AT LOOM

FILLING A: 315/144/T-447 AKZO SCOTSBORO NYLON PICKS: 32 WT/YD: .1959  
(14,150)

FILLING B: 210/68/R-20 DUPONT NYLON PICKS: 32 WT/YD: .1305  
(21,250)  
\*INCLUDES 22 DENTS EACH SIDE FOR CATCH CORD,LENO,ETC.

FILLING C: \_\_\_\_\_ PICKS: \_\_\_\_\_ WT/YD: \_\_\_\_\_

WARP A: 315/144/T-447 AKZO SCOTTSBORO NYLON NO. ENDS: 4224 WT/YD: .3245  
(14,150)  
NO TINT - NO CUT MARKS

WARP B: \*\* ADDED AT SLASHER 24 ENDS FROM LEFT NO. ENDS: \_\_\_\_\_ WT/YD: \_\_\_\_\_  
EDGE AT SLASHER

WARP C: \_\_\_\_\_ NO. ENDS: \_\_\_\_\_ WT/YD: \_\_\_\_\_

WARPING LAYOUT

MAY ALSO BE WARPED AS BELOW:

12 - BMS @ 0 352 0  
SELV. BODY A SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY A SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

FOR HEADEND TICKET:

GREIGE EST. ACT.% GROUND OVERALL  
WIDTH WEIGHT CONT COUNT COUNT:

ISSUED BY: FRANCISCO BEDOYA Francisco Bedoya DATE: \_\_\_\_\_

COPIES: BURTON, REESE, HALEY, HAYER, B.JAMES.D. ROBBINS, WEAVE ROOM, J. GLENN  
D-10 R. DEATHERAGE (3), FRANCISCO BEDOYA (3) D-10



## CERTIFICATE OF CONFORMANCE

PAGE 1 OF 2

MANUFACTURER: Safety Components Fabric Tech. Inc.  
Duncan Plant  
Greenville, SC

TEST CONDITIONS: 72°F / 65% R.H.

CUSTOMER ID:

3/5/20

MATERIAL: W4934-02-9026

LOT: 20699

TEST DATE:

SPECIFICATION: TBD

Piece No. Sample No.	8661T			Specification Requirement	UNIT OF MEASURE	TEST PROCEDURES
GRAB TENSILE WARP	427	0	0	Min:	Pounds	ASTM-D-5034
FILLING	389	0	0	Min:	Pounds	ASTM-D-5034
ELONGATION WARP	42	0	0	Min: Max:	Percent	ASTM-D-5034
FILLING	44	0	0	Min: Max:	Percent	ASTM-D-5034
TONGUE TEAR WARP	27	0	0	Min:	Pounds	ASTM-D-2261
FILLING	26	0	0	Min:	Pounds	ASTM-D-2261
TRAPEZOID TEAR WARP	0	0	0	Min:	Pounds	ASTM-D-4533
FILLING	0	0	0	Min:	Pounds	ASTM-D-4533
SHRINKAGE WARP	1.56	0.00	0.00	Max:	Percent	1 HR @ 300 F
FILLING	0.00	0.00	0.00	Max:	Percent	1 HR @ 300 F
FLAMMABILITY	0.0	0.0	0.0	Max:	IN/MIN	FMVSS-302
BOB				Max:	Percent	
BIAS				Max:	Percent	
WEIGHT	5.14	0.00	0.00	Min: Max:	OZ/YD2	ASTM-D-3776
WIDTH	70.0	0.0	0.0	Min: Max:	INCHES	ASTM-D-3774
ENDS	59.4	0.0	0.0	Min: Max:	EPI	ASTM-D-3775
PICKS	63.4	0.0	0.0	Min: Max:	PPI	ASTM-D-3775
BODY THICKNESS	.010	0.000	0.000	Min: Max:	Inches	ASTM-D-1777
DYNAMIC AIR PERM ADAP				Min: Max:	m/sec	T.B.D.
EXPONENT				Min: Max:		T.B.D.

Material: W4934-02-9026

lot: 20699

Page 2 of 2

Piece No. Sample No.	86617			Specification Requirement	UNIT OF MEASURE	TEST PROCEDURES
MULLEN BURST NET				Min:	PSI	ASTM-D-3786
pH	7.5			Min: Max:	pH units	FTN 191
EXTRACTABLES (%)	.2			Max:	Percent	JPS 701
DYE STAIN	5			Min: 4	AATOC CROCK UNITS	JPS 701
AIR PERMEABILITY	0.00	0.00	0.00	Min: Max:	CFM	ASTM-D-737
CANTILEVER STIFFNESS WARP	0.0	0.0	0.0	Min: Max:	MG/CM2	ASTM-D-4032
FILL	0.0	0.0	0.0	Min: Max:	MG/CM2	ASTM-D-4032
CIRCULAR BEND WARP	.700	0.000	0.000	Min: Max:	Pounds	ASTM 4032
FILL	.700	0.000	0.000	Min: Max:	Pounds	ASTM 4032

I certify that the above tests were performed under my supervision in accordance with specification test requirements and that the reported test results are true, valid, and applicable to the samples tested. Test results as shown are within the acceptance limits for the parameters of the above material specifications except as noted with an asterisk (\*).

ROBERT M. HOLCOMBE LAB DIRECTOR  
(864) 240-2624

P-1065 (5/96)

[WI-2021]

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PERMISSION OF THE ORIGINATOR.

INFORMATION ONLY

## **EXHIBIT B**

PETTY COMP C YTS FABRIC  
TECHNOLOGIES, INC.

STYLE M1 YR LISTING  
Sample Specification

1000

Style: W4934-0003-9026 Level: IV

Description: 315 60 x 64 Acordis U/M: YD  
Low Warp tension  
8 harness and 6 banks of drop wires, 71% air space reed  
Dupont t-6.6 nylon  
Plain PICK AND PICK WITH 2 FILLING YARNS  
WEAVE 3 LOTS

acc: Either  
ave cut (yds): 200 Weave picks/inch: 64.00  
dges: Heat slit at loom  
yds size: BP-44C-4% SOLIDS IN SIZE BOX, 1% STRETCH ON SLASHING  
thar: 1 end 420/68 dk. blue nylon 24 ends from left side at slasher

Status: ACT  
Department no: 10  
Product code: 89 Airbag - driver uncoated  
Loom type: Dornier general  
Primary customer:  
Requested by: L. BEASLEY

Reed width: 81.23  
Dents/inch: 26.000  
Ends/dent: 2  
Sley count: 52.000  
No. ends: 4,224

erp yarn code: RNNL1538 Supplier: ACORDIS INDUSTRIAL FIBERS  
description: 315/144 T-447 HRT-8 Acordis Scottaboro Nylon  
Airbag Beams  
wist: None  
erge:

ill yarn code: RNNL1539 Supplier: ACORDIS INDUSTRIAL FIBERS  
description: 315/144 T-447 HRT-8 Acordis Scottaboro Nylon  
Airbag Tubes  
wist: None  
erge:

ackaging: See final inspection instructions  
rading: See final inspection instructions  
urpose: nylon coating fabric (Air bag)  
ube size: See final inspection instructions

Roll code: 02  
Putup code: 11 Roll Goods  
Tare wt:  
CFN code:

		Est. Off Loom		Target	Est. Finished		Target
		Min	Max		Min	Max	
td wt (yds/lb):	1.59	75.50	76.50	76.00	69.50	70.50	70.00
eight (lbs/yd):	0.628	54 x 63	56 x 65	55 x 64	58 x 62	62 x 66	60 x 64
llow dev %:	3.00	4.71	4.71	4.71	4.93	4.93	4.93

Comments: As c/y B10-407 as W4934-02

Current rev: 000

Revision date: 08/10/1999 By: TK

ORIGINAL

FILLING YARN #2

RNNL 0051 210/72 T-447 HRT TUBES FROM ACORDIS, 100% AKZO

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015 (12/97)

(QUL-102,103)

WARPING ORDER

F-1017 11/88

(RE: QMS - 102)

SAFETY COMPONENTS FABRIC TECHNOLOGIES, INC. - DUNEAN PLANT - 80

WARPING, PROCESSING, WEAVING ORDER AND HEADEND TICKET

STYLE: W-4934 EXP.-3 TYPE CLOTH: NYLON COATING AIR BAGS DATE: \_\_\_\_\_

NO. REED DENT ENDS TOTAL  
BEAMS: 1 SPREAD: 81.23" REED: 26.00 DENT: 2 DENTS: 2158" SLEY: 52.00 SHAFTS: 8

DRAW: STRAIGHT WEAVE: PLAIN EST % TYPE DIST. BTWN  
CONT: 8% LOOM: DORNIER BM. HEAD: 81.75"  
BODY  
DEPT.: 10 ENDS: 4224 SELV ENDS: 1 TOTAL ENDS: 4225  
WEIGHT  
SELVAGE: \*\* 1 END 420/68 DEN. DARK BLUE NYLON - HEAT SLIT AT LOOM PER YARD: .0001

FILLING A: 315/144/T-447 AKZO SCOTSBORO NYLON PICKS: 32 WT/YD: .1959  
(14,150)

FILLING B: 210/72/R-20 ACORDIS 100% T-447 HRT FROM AKZO PICKS: 32 WT/YD: .1305  
\*INCLUDES 22 DENTS EACH SIDE FOR CATCH CORD, LENO, ETC. (21,250)

FILLING C: \_\_\_\_\_ PICKS: \_\_\_\_\_ WT/YD: \_\_\_\_\_

WARP A: 315/144/T-447 AKZO SCOTSBORO NYLON NO. ENDS: 4224 WT/YD: .3245  
NO TINT - NO CUT MARKS (14,150)

WARP B: \*\* ADDED AT SLASHER 24 ENDS FROM LEFT NO. ENDS: \_\_\_\_\_ WT/YD: \_\_\_\_\_  
EDGE AT SLASHER

WARP C: \_\_\_\_\_ NO. ENDS: \_\_\_\_\_ WT/YD: \_\_\_\_\_

WARPING LAYOUT

MAY ALSO BE WARPED AS BELOW

**AIR BAG**

12 - BMS @ 0 352 0  
SELV. BODY A SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY A SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

\_\_\_\_\_ - BMS @ \_\_\_\_\_  
SELV. BODY SELV.

FOR HEADEND TICKET:

GREIGE EST. ACT.% GROUND OVERALL  
WIDTH WEIGHT CONT COUNT COUNT:

ISSUED BY: FRANCISCO BEDOYA Francisco DATE: \_\_\_\_\_

cc: BEASLEY, BURTON, REESE, HALEY, HAVER, B. JAMES, D. ROBBINS, WEAVE ROOM, J. GLENN  
D-10 R. DEATHERAGE (3), FRANCISCO BEDOYA (3) D-10

**CERTIFICATE OF CONFORMANCE**

PAGE 1 OF 2

MANUFACTURER: Safety Components Fabric Tech. Inc.  
Duncan Plant  
Greenville, SC

TEST CONDITIONS: 72°F / 65% R.H.

CUSTOMER ID:

**INFORMATION ONLY**

MATERIAL: W4934-01-9026

LOT: 21138

TEST DATE:

SPECIFICATION: TBD

Piece No. Sample No.	17530	17540		Specification Requirement	UNIT OF MEASURE	TEST PROCEDURES
GRAB TENSILE WARP	450	442	0	Min:	Pounds	ASTM-D-5034
FILLING	379	389	0	Min:	Pounds	ASTM-D-5034
ELONGATION WARP	38	38	0	Min: Max:	Percent	ASTM-D-5034
FILLING	39*	40*	0	Min: Max:	Percent	ASTM-D-5034
TONGUE TEAR WARP	28	27	0	Min:	Pounds	ASTM-D-2261
FILLING	27	27	0	Min:	Pounds	ASTM-D-2261
TRAPEZOID TEAR WARP	0	0	0	Min:	Pounds	ASTM-D-4533
FILLING	0	0	0	Min:	Pounds	ASTM-D-4533
SHRINKAGE WARP	1.56	1.56	0.00	Max:	Percent	1 HR @ 300 F
FILLING	.31	.31	0.00	Max:	Percent	1 HR @ 300 F
FLAMMABILITY	0.0	0.0	0.0	Max:	IN/KIN	PHVSS-302
BOW	.31	.50		Max:	Percent	
BIAS	.75	.75		Max:	Percent	
WEIGHT	5.02	4.99	0.00	Min: Max:	OZ/YD2	ASTM-D-3776
WIDTH	70.5	71.0	0.0	Min: Max:	INCHES	ASTM-D-3774
EDS	58.3	58.3	0.0	Min: Max:	EPI	ASTM-D-3775
PICKS	62.6	62.5	0.0	Min: Max:	PPI	ASTM-D-3775
BODY THICKNESS	.010	.010	0.000	Min: Max:	Inches	ASTM-D-1777
DYNAMIC AIR PERM ADAP				Min: Max:	cm/sec	T.B.D.
EXFONENT				Min: Max:		T.B.D.

Material: W4934-03-9026

lot: 21138

Piece No. Sample No.	17530	17540		Specification Requirement	UNIT OF MEASURE	TEST PROCEDURES
MULLEN BURST HT				Min:	PSI	ASTM-D-3786
pH	7.1	6.8		Min: Max:	pH units	FTM 191
EXTRACTABLES (%)	.5	.6		Max:	Percent	JPS 701
DYE STAIN	5	5		Min: 4	AATCC CROCK UNITS	JPS 701
AIR PERMEABILITY	2.04	2.00	0.00	Min: Max:	CFM	ASTM-D-737
CANTILEVER STIFFNESS WARP	0.0	0.0	0.0	Min: Max:	MG/CM2	ASTM-D-4032
FILL	0.0	0.0	0.0	Min: Max:	MG/CM2	ASTM-D-4032
CIRCULAR BEND WARP	.800	.800	0.000	Min: Max:	Pounds	ASTM 4032
FILL	.800	.800	0.000	Min: Max:	Pounds	ASTM 4032

I certify that the above tests were performed under my supervision in accordance with specification test requirements and that the reported test results are true, valid, and applicable to the samples tested. Test results as shown are within the acceptance limits for the parameters of the above material specifications except as noted with an asterisk (\*).

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F-1065 (5/96)

[NY-2021]

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PERMISSION OF THE ORIGINATOR.

**INFORMATION ONLY**

# EXHIBIT C



PROD. REQ. & COST FORM

TO: FRANCISCO BEDOYA

DATE

I. MARKETING

CUSTOMER: CUST. S/# C/R# 10-386

SCFTI S/#: 28355 WEAVE: Plain ENDUSE: Fiskay LEVEL 4

GR. (MIN./NOM.)	FIN. (MIN./NOM.)	YES	NO
ENDS/IN: 41-43	44-	WARP SIZE OK	<input checked="" type="checkbox"/>
PICKS/IN: 48-50	49	SPUN YARN TINT	
WIDTH: 69.5-70.5	65-66	HI. TEN REQD	

WARP: 420/68/1220 Nylon Dupont T743 (OLD/NEW)

FILL: 420/68/1220 Nylon Dupont T743 (1/2) (OLD/NEW)

SCFTI PROCESS: 315/96/1220 Nylon Dupont T729 (1/2)

GREIGE	CUT LENGTH RANGE	500
HEATSET IN THE GR.	MIN PC. LENGTH	200
SCOUR & HEATSET	SPLICES ALLOWED	yes
APPLY & FINISH	PACKAGING	1" spiral tube
	Wrapped in clear plastic	FINISH CODE: 9026

DESCRIBE FINISH:

CFM RANGE: NA CUST. SPEC # T80 DATED: COPY OF CUST. SPEC ATTACHED (TEST REQ. Y/N) (CERT REQ Y/N) DEPT#: 10

II. TECHNICAL

TYPE LOOM: Dornier MULTIPLE PICKS - YES/NO EQUIVALENT PICKS: N/A YARDS PER BEAM: N/A (WARP IN PLANT & NEW YARNS ONLY)

CONST. IN LOOM: REED WIDTH: 74.60" SLEY: 40.0 OFF LM PICKS: 490

WARP: 420/68/1220 Nylon Dupont T-743

FILLING: 420/68/1220 Nylon Dupont T-743 pick and piece WARP YDS/LB: 10.600 FILLING YDS/LB: 10.600: 4204, 14.160: 315

EST. WARP CONTRACTION: 890

REMARKS: sample first

SIGNATURE: Ramon DATE: 5-21-99

PROCESSES REQUIRED: (CIRCLE AS APPLICABLE)	WEAVING	FINISHING	FINAL	TESTING
PREPARATION	DORNIER	BATCH	SLIT	INTERNAL
WINDING	SULZER	SCOUR - JIG/CONT.	INSPECT	CUST. LOT
TWISTING (IN/OUT)		CAN DRY	PACK	NONSTD.
WARPING (IN/OUT)		CONTACT HT SET SHIP		PPAP
(BLOCK/TRANS.)		CALENDER/TENTER		ANNUAL
BEAMING/SLASHING				QUAL.

III. ENGINEERING  
LOOMS/WEAVER: \_\_\_\_\_

OTHER: \_\_\_\_\_

DATE FWDED: \_\_\_\_\_

IV. COST DEPARTMENT

YDS/LOOM  
120 HRS. \_\_\_\_\_

TARGET CONTRIBUTION  
LOOM/WK \_\_\_\_\_ YD \_\_\_\_\_

FAB. WT. \_\_\_\_\_

OZ./SQ. YD. \_\_\_\_\_

COST: \_\_\_\_\_

VAR./YD: \_\_\_\_\_

FX/YD: \_\_\_\_\_

B/E/YD: \_\_\_\_\_

MIN. YD: \_\_\_\_\_

TAR. YD: \_\_\_\_\_

YARN PRICE: \_\_\_\_\_

WARP: \_\_\_\_\_

FILL: \_\_\_\_\_

SPECIAL INSTRUCTIONS: \_\_\_\_\_

DISCLAIMERS/COMMENTS:

- A) Uphove adhesion values below 630d are very low. Trial evaluation by making surface rougher with two different devices should provide better surface adhesion.
- B) If successful would remarks in warp and fill.

SUBMITTED BY J. H. Johnson

DATE: \_\_\_\_\_

APPROVED BY MARKETING MGR. L. B. Johnson

DATE: \_\_\_\_\_

APPROVED BY DIR. TECH. SVCS K. Bates

DATE: \_\_\_\_\_

REJ. APPR TECH. SERV. MGR. K. Bates

DATE: \_\_\_\_\_

APPROVED BY MFG. REF. COMM. K. Bates

DATE: \_\_\_\_\_

FORWARD TO: \_\_\_\_\_

OR \_\_\_\_\_

CC: \_\_\_\_\_

J. ANDERSON  
J. UNDERWOOD

S. DUERK  
D. HARVELL

## CERTIFICATE OF CONFORMANCE

PAGE 1 OF 2

MANUFACTURER: Safety Components Fabric Tech. Inc.  
Duncan Plant  
Greenville, SC

TEST CONDITIONS: 72°F / 65% R.H.

CUSTOMER ID:

MATERIAL: W4951-01-9026

LOT: 20701

TEST DATE:

SPECIFICATION: TBD

Piece No. Sample No.	8619T			Specification Requirement	UNIT OF MEASURE	TEST PROCEDURES
GRAB TENSILE WARP	430	0	0	Min:	Pounds	ASTM-D-5034
FILLING	424	0	0	Min:	Pounds	ASTM-D-5034
ELONGATION WARP	34	0	0	Min: Max:	Percent	ASTM-D-5034
FILLING	43	0	0	Min: Max:	Percent	ASTM-D-5034
TONGUE TEAR WARP	47	0	0	Min:	Pounds	ASTM-D-2261
FILLING	41	0	0	Min:	Pounds	ASTM-D-2261
TRAPEZOID TEAR WARP	0	0	0	Min:	Pounds	ASTM-D-4533
FILLING	0	0	0	Min:	Pounds	ASTM-D-4533
SHRINKAGE WARP	1.25	0.00	0.00	Max:	Percent	1 HR @ 300 F
FILLING	0.00	0.00	0.00	Max:	Percent	1 HR @ 300 F
FLAMMABILITY	0.0	0.0	0.0	Max:	IN/MIN	FMVSS-302
BOW	.56			Max:	Percent	
BIAS	.50			Max:	Percent	
WEIGHT	5.10	0.00	0.00	Min: Max:	OZ/YD2	ASTM-D-3776
WIDTH	66.0	0.0	0.0	Min: Max:	INCHES	ASTM-D-3774
ENDS	44.5	0.0	0.0	Min: Max:	EPI	ASTM-D-3775
PICKS	48.3	0.0	0.0	Min: Max:	PPI	ASTM-D-3775
BODY THICKNESS	.012	0.000	0.000	Min: Max:	Inches	ASTM-D-1777
DYNAMIC AIR PERM ADAP				Min: Max:	ml/sec	T.B.D.
EXPONENT				Min: Max:		T.B.D.

Material: W4951-01-9026

lot: 20701

Page 2 of 2

Piece No. Sample No.	86197			Specification Requirement	UNIT OF MEASURE	TEST PROCEDURES
MILLEN BURST NET				Min:	PSI	ASTM-D-3786
pH	7.0			Min: Max:	pH units	FTM 191
EXTRACTABLES (%)	.5			Max:	Percent	JPS 701
DYE STAIN	5			Min: 4	AATOC CROCK UNITS	JPS 701
AIR PERMEABILITY	6.04	0.00	0.00	Min: Max:	CFM	ASTM-D-737
CANTILEVER STIFFNESS WARP	0.0	0.0	0.0	Min: Max:	MG/CM2	ASTM-D-4032
FILL	0.0	0.0	0.0	Min: Max:	MG/CM2	ASTM-D-4032
CIRCULAR BEND WARP	0.000	0.000	0.000	Min: Max:	Pounds	ASTM 4032
FILL	0.000	0.000	0.000	Min: Max:	Pounds	ASTM 4032

I certify that the above tests were performed under my supervision in accordance with specification test requirements and that the reported test results are true, valid, and applicable to the samples tested. Test results as shown are within the acceptance limits for the parameters of the above material specifications except as noted with an asterisk (\*).

ROBERT M. HOLCOMBE LAB DIRECTOR  
(864) 240-2624

F-1065 (5/96)

[WI-2021]

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